

## XP-002088214

- 1/1 - (C) WPI / DERWENT  
AN - 97-544511 c50!  
AP - JP960072417 960327  
PR - JP960072417 960327  
TI - Photocatalyst for sterilising and deodorising air - has photocatalyst layer, formed on base, containing titanium di:oxide, silicon di:oxide and metallic oxide photocatalytic particles  
IW - PHOTOCATALYST STERILE DEODORISE AIR PHOTOCATALYST LAYER FORMING BASE CONTAIN TITANIUM DI OXIDE SILICON DI OXIDE METALLIC OXIDE PHOTOCATALYST PARTICLE  
PA - (TOKE ) TOSHIBA LIGHTTECH KK  
PN - JP9262483 A 971007 DW9750 B01J35/02 007pp  
ORD - 1997-10-07  
IC - B01J35/02 ; F21V3/04 ; H01J61/35  
FS - CPI;GMPI;EPI  
DC - J04 Q71 X26  
AB - J09262483 The object consists of a base (1) whose surface is coated with a photocatalyst layer (2) formed by mixing silicon dioxide particles (4) as a metallic oxide particle for binding and titanium dioxide particles (3) as a photocatalytic oxide particle. The grain sizes (Rs,Rt) of the silicon dioxide particle and titanium dioxide particles are respectively set to satisfy the relationship  $1/10$  at most  $Rt/Rs$  at most 1. The gaps between the silicon dioxide particles is larger than those between the particles of titanium dioxide. The titanium dioxide particles being of smaller grain sizes enter the gaps between the silicon dioxide particles, when being mixed, effectively decreasing the gaps between the silicon dioxide particles. The exposure of titanium dioxide particles to the surface of the photocatalyst layer increases as a result.  
- USE - In decomposing, purifying and sterilising toxic substances in air, e.g. bad odours, oil components by catalytic action with irradiation of light.  
- ADVANTAGE - Decreases quantity of photocatalytic oxide particles entering in gaps between metallic oxide particles for binding, ensures adequate contact of photocatalytic particles with gas to be decomposed, achieves high photocatalytic property, and prevents reduction in film density.  
- (Dwg. 1/5)